

IN THE SPECIFICATON:

(a) IN THE DRAWINGS

Please enter the enclosed sheets of Drawings showing additional numerals and new FIG. 2A.

(b) IN THE TITLE

Please change the title to read:

HIGH VELOCITY NEEDLE INJECTION SYSTEM

(c) IN THE DESCRIPTION

On page 10, delete the paragraph formed by lines 19 - 22 and substitute the following heading and subparagraphs:

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BRIEF DESCRIPTION OF DRAWINGS

FIG. 1 is a schematic view illustrating a first embodiment of the invention;

FIGS. 1a and 1b illustrate two forms of flexible passage means;

FIG. 2 is a schematic view of a second embodiment of the invention; and

FIG. 2A is an enlarged view of the left portion of FIG. 2.

Cancel the first and second paragraphs on page 11 and substitute the following two paragraphs:

02 In use the substance to be injected is placed in the syringe (10) and the one or more blocks (20) are at the end of conduit (9) remote from the end of the needle (7). The end of the needle (7) is placed against the surface to be injected and a pulse of high pressure air is sent down conduit (9) so as to propel the one or more block (20), at the required high speed i.e. above 1 metre per sec, down conduit (9) to strike plate (8). The needle is then driven into the surface and an impact made on the plate (8) and the needle penetrates the surface. When the needle has penetrated the surface, the needle is stopped by end 9A of the conduit. The piston (1) in the syringe (10) is then depressed and the substance in the syringe is injected into the surface.

Referring to Figure 2 a syringe (24) has a needle (27) attached to one end and the needle has one or more openings near the tip (27) outside the syringe end seal (31) which forms a stop for the needle. ~~and~~ The needle has further openings 27A along shaft (23) lying inside the syringe end seal as illustrated in FIG. 2A whereby a substance in the syringe can enter the needle. An extension (28) to the needle (27) passes slidably and sealably through the piston (25) and

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terminates in a striker plate (29). The striker plate is positioned in conduit (30) down which blocks can be propelled pneumatically to strike plate (29).

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On page 10, cancel the last paragraph continuing onto the top of page 11, and substitute the following paragraph:

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a3  
Referring to Figure 1 a syringe (10) has a piston (1) mounted within it which can be depressed by handle (2). There is an outlet (4) from the syringe so that, when piston (1) is depressed, a substance in the body of the syringe (3) is forced out through the outlet (4). Attached to the outlet by a Luer connector (5) is one end of needle tube (13). The needle tube (13) is flexible and fixed to a holder (6) the needle. The tube can be a zig-zag shape or it can be coiled as shown in figs. 1a and 1b. Attached to holder (6) is a striker plate (8) which is the end piece to needle ~~(13)~~ (7) and is slidably mounted within conduit (9), there is block (20) positioned in the conduit. The end A of the conduit (9) is connected to pneumatic pump (11) or the like so that air under pressure can enter the conduit and propel the block (20) down the conduit to strike plate (8). Reversal of the direction of the air in the conduit will cause the block (20) to be sucked back to the end of the conduit.

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